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⑩ 実用新案出願公開

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昭64-46050

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審査請求 未請求 (全 頁)

⑭ 考案の名称 形状記憶プラスチックギブス

⑯ 実 願 昭62-140839

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明 細 書

1 考 案 の 名 称 形状記憶プラスチックギブス

2 実 用 新 案 登 録 請 求 の 範 囲

形状記憶プラスチック素材で、人体の各部位（１）（２）を外部から固定可能な成型（３）（４）とした形状記憶プラスチックギブス。

3 考 案 の 詳 細 な 説 明

この考案は、事故などによる骨折患者の骨折部位固定用ギブスに関するものである。

従来の骨折患者に対する固定用ギブスは、石膏素材を利用した石膏ギブスが主流となっているが、この方法は、医師側としては取り付け・取り外しの際に複雑作業が伴い時間的ロスが甚だしい現状にある。次に、患者側としては、重くて行動性を著しく損なっており、特に手・腕などの骨折部位固定の場合、首から吊るために首に苦痛を伴い、又、長期に渡る時はギブス内面に接する皮膚の症状が悪化し、痒みによる苦痛が最大の障害となつて

いる。さらには衛生的にも汚れが激しく患者の不快感を増大させている現状にある。

この考案は、その欠点を除く為に考えたもので以下その構造を図面とともに説明すれば、

形状記憶プラスチック素材で、人体の骨折事故発生が予期される各部位（１）（２）を外部から固定できる様な型（３）（４）に成型したものである。勿論、（１）（２）の各部位については例示的部位である。

この様に成型することにより、形状記憶プラスチックは、現代技術ベースでは、摂氏40度以上でゴム状となり、摂氏40度以下で固定化する特性を有しており、使用に当たっては湯またはドライヤーなどで加熱することにより簡単に何度でも利用が可能となった。

従って、医師はもとより救急作業者にあっても、又、必要に応じては素人でも使用できる。さらには、素材そのものが軽い為、患者側にあっても行動性が確保でき、医師の指示に基づき固定中であってもギブスを開いて清

深にすることも可能となった。最後に、使用前にあっては完成品を加熱することにより極めてコンパクトに収納できる利点のあることを挙げる。

4 図面の簡単な説明

図は本考案を示す平面図及び一部立体図

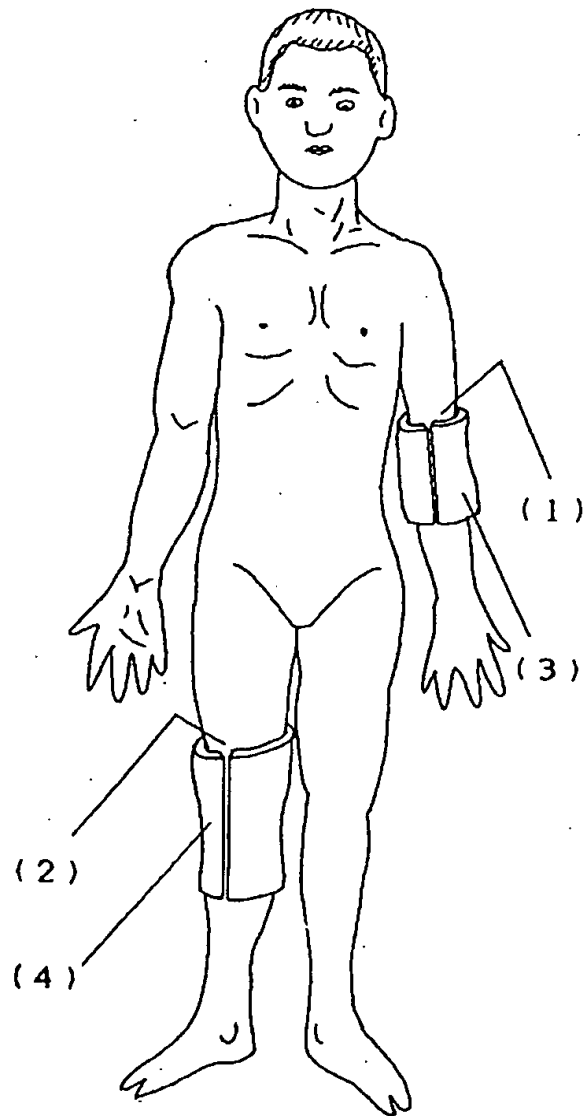
(1) (2) は人体の各部位 (例示)

(3) (4) は形状記憶プラスチックで成型したギブス

実用新案登録出願人

北 森 吉 和

圖 面



實用新案登録出願人
北 森 雪 和

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実開 64-46050

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(54) Title of the design Form-retaining plastic cast

(21) Application no. S62-140839

(22) Filing date 14 September 1987

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Specification

1. Title of the design Form-retaining plastic cast

2. Scope of the utility model claim

Form-retaining plastic cast which is made from a form-retaining plastic material, and which is made as a cast (3), (4) able to fix, from the outside, human body parts (1), (2).

3. Detailed description of the design

This design relates to a cast for fixing the fractured bone parts of those people who have suffered broken bones in accidents etc.

Plaster casts using plaster material are mainly used as conventional fixing casts for fracture patients, but, from the doctor's point of view, the present situation is very serious with regards to the losses in terms of time brought about by the complicated procedures for the fitting and removal of the said casts with this method. Next, from the patient's point of view, because said casts are heavy, the patient's mobility is greatly affected, and particularly when the fractured bone part to be fixed is a hand or an arm, because the cast hangs from the neck, neck pains are brought about, and when the cast is worn for a long time, the condition of the skin in contact with the inner surface of the cast deteriorates, with the discomfort brought about by itching being the greatest problem. Furthermore, with the present situation, with regards to hygiene, when the cast becomes very dirty, the patient's feelings of discomfort are increased.

The present design was thought up in order to alleviate the abovementioned defects, and to describe the configuration thereof alongside the figure, it is a design which is made from a form-retaining plastic material, and which is cast into a form (3), (4) which can fix, from the outside, the parts (1), (2), of the human body which one could expect to fracture in an accident. Of course, the parts (1), (2), are illustrative parts.

By casting in this way, the form-retaining plastic, with the current technological base, has properties such that it becomes rubber at 40°C or above, and at 40°C or below, it hardens, and in use, it can be easily employed numerous times by heating with hot water or a drier or the like.

Accordingly, it can of course be used by doctors, but also by emergency workers, or even, if necessary, by unskilled people. Furthermore, as the material itself is light, from the patient's point of view, his mobility can be maintained, and under his doctor's instructions, it is

possible to open the cast, even in the course of fixing, and clean it. Finally, there is also the advantage that prior to use, by heating the finished product, it can be made extremely compact for storage.

4. Brief description of the drawing

The drawing is a plan surface and part dimensional view showing the present design.

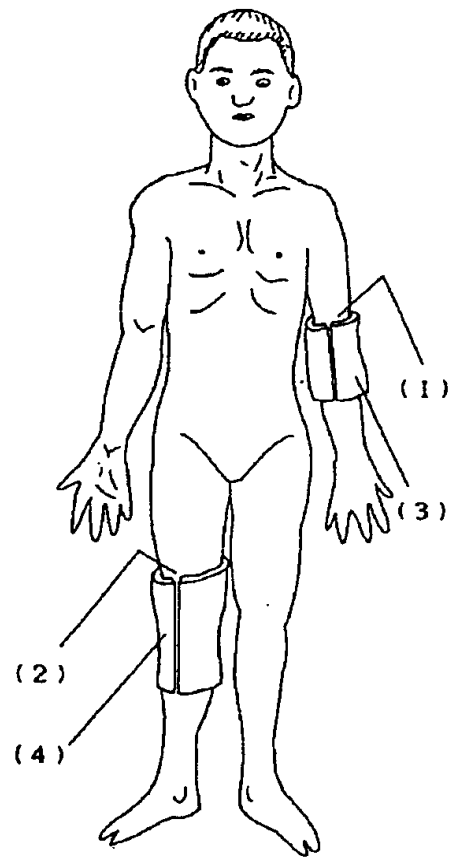
(1) (2) are parts of the human body (illustrative)

(3) (4) are casts cast from form-retaining plastic

Utility model applicant

H. Kitamori

Drawings



Utility model applicant
H. Kitamori

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